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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/602,624	06/25/2003	Koji Kurokawa	1614.1341	9005
21171 STAAS & HAI	7590 01/22/2007 SEVIIP	EXAMINER		
SUITE 700			JOHNS, ANDREW W	
1201 NEW YO WASHINGTO	RK AVENUE, N.W. N. DC 20005		ART UNIT	PAPER NUMBER
		•	2624	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE .	DELIVERY MODE	
3 MONTHS		01/22/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

		Application No.	Applicant(s)			
Office Action Summary		10/602,624	KUROKAWA ET AL.			
		Examiner	Art Unit			
		Andrew W. Johns	2624			
D!! 6:	The MAILING DATE of this communication app	ears on the cover sheet wi	th the correspondence address			
Period fo	• •					
WHIC - Exte after - If NC - Failu Any	CORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Depend for reply is specified above, the maximum statutory period ware to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing led patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNIC 36(a). In no event, however, may a re- rill apply and will expire SIX (6) MON cause the application to become AB	CATION. eply be timely filed THS from the mailing date of this communication. ANDONED (35 U.S.C. § 133).			
Status		•	•			
1)□	Responsive to communication(s) filed on					
2a)□	• • • • • • • • • • • • • • • • • • • •	-· action is non-final.				
3)						
,—	closed in accordance with the practice under E					
Disposit	ion of Claims	•				
4)⊠	Claim(s) 1-20 is/are pending in the application.					
	4a) Of the above claim(s) is/are withdraw		-			
	Claim(s) is/are allowed.					
· -	Claim(s) 1-20 is/are rejected.	•				
7)	Claim(s) is/are objected to.					
8)□	Claim(s) are subject to restriction and/or	election requirement.				
Applicat	ion Papers		•			
9)[The specification is objected to by the Examiner	r.				
10)🖂	The drawing(s) filed on 25 June 2003 is/are: a)	⊠ accepted or b)⊡ obje	cted to by the Examiner.			
	Applicant may not request that any objection to the	drawing(s) be held in abeyan	ce. See 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the correcti	on is required if the drawing((s) is objected to. See 37 CFR 1.121(d).			
11)□	The oath or declaration is objected to by the Ex	aminer. Note the attached	Office Action or form PTO-152.			
Priority ι	under 35 U.S.C. § 119					
12)🛛	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. &	·119(a)-(d) or (f).			
	☑ All b)☐ Some * c)☐ None of:	, ,				
	1. Certified copies of the priority documents	have been received.				
	2. Certified copies of the priority documents		pplication No			
	3. Copies of the certified copies of the prior	ity documents have been	received in this National Stage			
	application from the International Bureau	(PCT Rule 17.2(a)).				
* 5	See the attached detailed Office action for a list of	of the certified copies not	received.			
		•				
Attachmen	t(s)					
_	e of References Cited (PTO-892)	4) Interview S	ummary (PTO-413)			
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date			
3) IXI Infor	mation Disclosure Statement(s) (PTO/SB/08)	5) ☐ Notice of In	formal Patent Application			

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DETAILED ACTION

Claim Rejections - 35 U.S.C. § 101

1. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

M.P.E.P. § 2106.01 reads, in part, as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (discussing patentable weight of data structure limitations in the context of a statutory claim to a data structure stored on a computer readable medium that increases computer efficiency) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure *per se* held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

2. Claims 13-18 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claims 13-18 variously define a computer program embodying functional descriptive material. However, the claims do not define a computer-readable medium or memory and are thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since the use of technology permits the function of

the descriptive material to be realized" – M.P.E.P. § 2106.01). That is, the scope of the presently claimed program can range from paper on which the program is written, to a program simply contemplated and memorized by a person. The examiner suggests amending the claim to embody the program on "computer-readable medium" or equivalent in order to make the claim statutory. Any amendment to the claim should be commensurate with its corresponding disclosure, and care should be taken not to duplicate subject matter variously defined by claims 19 and 20, which properly define a program on a computer readable recording medium.

Claim Rejections - 35 U.S.C. § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-3, 5, 7-9, 11, 13-15, 17 and 19-20 are rejected under 35 U.S.C. § 102(b) as being anticipated by Kohchi (US 2002/0006220 A1).

Kohchi teaches an apparatus (shown generally in Figure 1), method (shown generally in Figure 2) and program on a computer readable recording medium (paragraph [0044]) for recognizing information in a real document (paragraph [[0045]) and inputting the recognized information to a document displayed on a computer (S112 in Figure 2), comprising designating an area to be processed in the real document (paragraph [0048]); detecting the designated area to be processed (lines 4-12 in paragraph [0051]); reading an image of the area to be processed (paragraph [0047]); recognizing the image of the area to be processed as text information (lines 1-3 in paragraph [0051]); and pasting the result of the recognizing to a pertinent position of the

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document displayed by the computer (paragraph [0052]), as variously required by claims 1, 7, 13 and 19. In addition, Kohchi also teaches determining whether the area has a text attribute, a table attribute or a figure attribute (paragraph [0049], where the image is separated into photographs (i.e., figures), text and ruled lines (i.e., tables)), as further required by claims 2, 8, 14 and 20, the determination based on the areas (i.e., the rectangles) designated in the designating step, as further stipulated by claims 3, 9 and 15. Finally, areas determined to have a text attribute are determined to have a mode designated, the mode for recognizing the area to be processed as text information (paragraphs [0049] and [0051] the text areas are identified for OCR processing), as further defined by claims 5, 11 and 17.

Claim Rejections - 35 U.S.C. § 103

- 5. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 4, 6, 10, 12, 16 and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kohchi as applied to claims 1-3, 5, 7-9, 11, 13-15, 17 and 19-20 above, and further in view of Lech et al. (US 5,369,508 A).

While Kohchi meets a number of the limitations of the claimed invention, as pointed out more fully above, Kohchi fails to teach that the area designation is performed based on the movement of the designating part or how the designation is done, as variously required by claims 4, 10 and 16, or detecting a character sequence within a predetermined distance as the area to be

processed when the position designated is outside any cell, as further required by claims 6, 12 and 18.

Lech et al. teaches a system for capturing information from a real document (232L in Figure 3B) and pasting it into pertinent locations in a displayed document (232R in Figure 3B), that includes designating areas to be processed in accordance with the movement of a designating device (i.e., a mouse, column 12, lines 49-54) and further processes an area having a character string nearest to a position designated (column 6, lines 29-41). Because such user interactive designation of the document areas will provide more accurate and rapid data capture compared to the automated document analysis of Kohchi, it would have been obvious to one of ordinary skill in the art to use such manual designation such as suggested by Lech et al. to improve the document capture of Kohchi.

Conclusion

- 7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Herley teaches detecting and classifying areas in scanned images, while Chakraborty teaches automatically extracting information from digitized documents.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Johns whose telephone number is (571) 272-7391. The examiner in normally available Monday through Friday, at least during the hours of 9:00 am to 3:00 pm Eastern Time. The examiner may also be contacted by e-mail using the address: andrew.johns@uspto.gov. (Applicant is reminded of the Office policy regarding e-mail communications. See M.P.E.P. § 502.03)

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Matt Bella, can be reached at (571) 272-7778. The fax phone number for this art unit is (571) 273-8300. In order to ensure prompt delivery to the examiner, all unofficial communications should be clearly labeled as "Draft" or "Unofficial."

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center Receptionist whose telephone number is (571) 272-2600.

A. Johns

16 January 2007

ANDREW W. JOHN

PIMARY EXAMINER